

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method in a host channel adapter, the method comprising:

first storing in a table, at an end of each access cycle by a retransmission manager, entries identifying respective packets wherein each entry identifies a corresponding one of said packets, said packets having been transmitted onto an InfiniBand™ network according to InfiniBand™ protocol and during said each access cycle according to an InfiniBand™-based service protocol requiring an acknowledgement message receipt within a prescribed time interval following transmission of the corresponding packet;

resetting an acknowledgment waiting bit for a selected one of the entries by an acknowledgement manager in response to reception of an acknowledgment message identifying the corresponding packet identified by the selected one entry; and

transferring the entries having a determined absence of the reset stored acknowledgment waiting bit upon expiration of the prescribed time interval to a transmit queue for retransmission onto the InfiniBand™ network according to InfiniBand™ protocol.

2. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the first storing step includes:

counting during each access cycle a number of the packets having been transmitted during said each access cycle according to the service protocol;

setting the acknowledgment waiting bit for each of the entries stored during said each access cycle; and

inserting the counted number into a number of packets field within the entry corresponding to a first of the packets transmitted during said each access cycle.

3. (ORIGINAL) The method of claim 2, further comprising determining the entries having the determined absence by:

accessing the entry for the first of the packets transmitted during an access cycle having passed the expiration of the prescribed time interval; and

determining whether the accessed entry includes a reset acknowledgment waiting bit.

4. (ORIGINAL) The method of claim 3, wherein the transferring step includes transferring the accessed entry and selected subsequent entries based on the counted number stored in the accessed entry to the transmit queue, independent of whether the selected subsequent entries have respective reset acknowledgment waiting bits.

5. (ORIGINAL) The method of claim 4, further comprising deleting the entries having passed beyond the expiration of the prescribed time interval.

6. (ORIGINAL) The method of claim 2, wherein the transferring step includes identifying the entries for transfer based on the counted number stored in the entry for the first of the packets.

7. (ORIGINAL) The method of claim 1, wherein said each access cycle is defined by a prescribed number of clock cycles.

8. (CURRENTLY AMENDED) A host channel adapter comprising:
a table configured for storing entries identifying respective packets wherein each entry identifies a corresponding one of said packets, said packets having been transmitted onto an InfiniBand™ network according to InfiniBand™ protocol and according to an InfiniBand™-based service protocol requiring an acknowledgment message receipt within a prescribed time interval following transmission of the corresponding packet, each entry including a packet identifier, and an acknowledgment waiting bit for identifying whether the corresponding acknowledgment message has been received;

a transmit queue configured for identifying packets to be transmitted onto the InfiniBand™ network according to InfiniBand™ protocol;

an acknowledgment manager configured for resetting the acknowledgment waiting bit for a selected one of the entries identifying reception of an acknowledgment message for the corresponding packet; and

a retransmission manager configured for storing in the table, at an end of each access cycle, the entries identifying the respective packets having been transmitted during said each access cycle, the retransmission manager transferring the entries having a determined absence of the reset acknowledgment waiting bit upon expiration of the prescribed time interval from the table to the transmit queue.

9. (PREVIOUSLY PRESENTED) The apparatus of claim 8, further comprising a counter configured for counting during said each access cycle a number of the packets having been transmitted during said each access cycle according to the service protocol, the retransmission manager inserting the counted number into a number of packets field within the entry corresponding to a first of the packets transmitted during said each access cycle.

10. (ORIGINAL) The apparatus of claim 9, wherein the retransmission manager accesses the entry for the first of the packets having been transmitted during an access cycle having passed the expiration of the prescribed interval, the retransmission manager transferring the accessed entry and selected subsequent entries based on the counted number stored in the accessed entry and identifying that the corresponding acknowledgment waiting bit has not been reset.

11. (PREVIOUSLY PRESENTED) The method of claim 7, wherein the first storing step includes storing by the retransmission manager said entries, in a single storage transaction, into the table after said prescribed number of clock cycles.

12. (PREVIOUSLY PRESENTED) The apparatus of claim 8, wherein said each access cycle is defined by a prescribed number of clock cycles, the retransmission manager is configured for storing said entries, in a single storage transaction, into the table after said prescribed number of clock cycles.

13. (CURRENTLY AMENDED) The apparatus of claim 8, wherein the host channel adapter is implemented as an application specific integrated circuit.